

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Amend claims 1, 20, and 21, as follows.

**Listing of Claims:**

1                   1. **(Currently amended)** A work-management method comprising:  
2                   for a future point in time and each one of a plurality of resources,  
3                   determining a probability of availability of the one resource at a said future point in  
4                   time ~~of each of a plurality of resources;~~  
5                   combining the probabilities to obtain a number; and  
6                   using the number to schedule new tasks for the resources for the  
7                   future point in time.

1                   2. **(Original)** The method of claim 1 wherein:  
2                   using comprises  
3                   scheduling for the future point in time no more than the number of the  
4                   new tasks to become available for servicing by the plurality of the resources.

1                   3. **(Original)** The method of claim 1 wherein:  
2                   combining comprises  
3                   summing the probabilities to obtain the number.

1                   4. **(Previously presented)** The method of claim 1 wherein:  
2                   determining comprises  
3                   for each of the resources, determining an amount of time  $t$  that the  
4                   resource has been servicing a task by now;  
5                   for each of the resources, determining a probability  $F(t+h)$  of the  
6                   resource servicing its task to completion within a total amount of time  $t+h$ , where  
7                   h is an amount of time;  
8                   for each of the resources, determining a probability  $F(t)$  of the  
9                   resource completing servicing its task by now; and

10                   for each of the resources, determining a probability  $P$  that the  
11   resource will complete servicing its task at the future point in time the amount of  
12   time  $h$  from now as  $\frac{F(t+h) - F(t)}{1 - F(t)}$ .

1                   5. **(Original)** The method of claim 1 in a call center wherein:  
2                   tasks comprise calls; and  
3                   scheduling comprises  
4                   in response to  $P$ , determining whether or not to initiate or cancel an  
5   outbound call.

1                   6. **(Previously presented)** A work-management method  
2   comprising:  
3                   determining an amount of time  $t$  that a resource has been servicing a  
4   task by now;  
5                   determining a probability  $F(t+h)$  of the resource servicing the task to  
6   completion within a total amount of time  $t+h$ , where  $h$  is an amount of time;  
7                   determining a probability  $F(t)$  of the resource completing servicing the  
8   task by now;  
9                   determining a probability  $P$  that the resource will complete servicing  
10   the task within the amount of time  $h$  from now as  $\frac{F(t+h) - F(t)}{1 - F(t)}$ ; and  
11                  in response to  $P$ , scheduling another task for servicing.

1                   7. **(Original)** The method of claim 6 wherein:  
2                   scheduling comprises  
3                   in response to  $P$ , determining whether or not to initiate said another  
4   task.

1                   8. **(Original)** The method of claim 6 in a call center wherein:  
2                   tasks comprise calls; and  
3                   scheduling comprises

4 in response to  $P$ , determining whether or not to initiate an outbound  
5 call.

1 9. **(Original)** The method of claim 6 further comprising:  
2 performing the determining steps for a plurality of resources, and  
3 determining a number of the resources that will likely have completed  
4 servicing their respective tasks within the amount of time  $h$  from now as a sum of  
5 the probabilities  $P$  determined for individual ones of the plurality of resources;  
6 wherein  
7 scheduling comprises  
8 in response to determining the number of the resources, scheduling  
9 new tasks for servicing.

1 10. **(Original)** The method of claim 9 wherein:  
2 scheduling tasks for servicing comprises scheduling no more than  
3 the number of the tasks for servicing.

1 11. **(Original)** The method of claim 6 wherein:  
2 determining a probability  $F(t+h)$  comprises  
3 obtaining historical task-completion statistics, and  
4 from the obtained statistics determining the probability  $F(t+h)$ ; and  
5 determining a probability  $F(t)$  comprises  
6 from the obtained statistics determining the probability  $F(t)$ .

1 12. **(Original)** The method of claim 11 wherein:  
2 obtaining historical task-completion statistics comprises  
3 obtaining a mean and a variance of time historically spent by  
4 resources on servicing tasks to completion.

1 13. **(Original)** The method of claim 6 wherein:  
2 determining a probability  $F(t+h)$  comprises  
3 obtaining historical task-completion statistics,

4                    fitting the task-completion statistics into a lifetime closed-form  
5   cumulative-probability distribution to determine parameters of the distribution,  
6   and  
7                    evaluating the distribution with the determined parameters and the  
8   total amount of time  $t+h$  to obtain  $F(t+h)$  ; and  
9                    determining a probability  $F(t)$  comprises  
10                   evaluating the distribution with the determined parameters and the  
11   amount of time  $t$  to obtain  $F(t)$ .

1                    14. **(Original)** The method of claim 13 wherein:  
2                    obtaining historical task-completion statistics comprises  
3                    obtaining a mean and a variance of time historically spent by  
4   resources on servicing tasks to completion;  
5                    the cumulative-probability distribution  $F$  comprises a Weibull  
6   distribution; and  
7                    the parameters comprise a dispersion parameter and a parameter of  
8   central tendency.

1                    15. **(Original)** The method of claim 6 wherein:  
2                    determining an amount of time  $t$  comprises  
3                    determining the amount of time  $t$  that the resource has been servicing  
4   a task of one of a plurality of different types of tasks; and  
5                    determining historical task-completion statistics comprises  
6                    determining the historical task-completion statistics for the one type  
7   of tasks.

1                    16. **(Original)** The method of claim 6 wherein:  
2                    scheduling another task comprises  
3                    in response to  $P$  initiating preparation of a task that may require  
4   servicing by an agent at a later time.

1                    17. **(Original)** The method of claim 6 wherein:  
2                    determining a probability  $F(t+h)$  comprises

3 obtaining a historical histogram for task completion, and  
4 evaluating a cumulative said probability with the obtained histogram  
5 for the total amount of time  $t+h$  to obtain  $F(t+h)$ ; and  
6 determining a probability  $F(t)$  comprises  
7 evaluating the cumulative probability with the obtained histogram for  
8 the amount of time  $t$  to obtain  $F(t)$ .

1 18. **(Original)** The method of claim 6 wherein:  
2 scheduling comprises  
3 in response to  $P$ , canceling preparation of a task that could require  
4 servicing by a resource.

1 19. **(Previously canceled)**

1 20. **(Currently amended)** A computer-readable medium containing  
2 instructions which, when executed in a computer, cause the computer to perform  
3 the steps of:  
4 for a future point in time and each one of a plurality of resources,  
5 determining a probability of availability of the one resource at asaid future point in  
6 ~~time of each of a plurality of resources;~~  
7 combining the probabilities to obtain a number; and  
8 using the number to schedule new tasks for the resources for the  
9 future point in time.

1 21. **(Currently amended)** A work-management apparatus  
2 comprising:  
3 means for determining, for a future point in time and each one of a  
4 plurality of resources, a probability of availability of the one resource at asaid  
5 ~~future point in time of each of a plurality of resources;~~  
6 means cooperative with the determining means for combining the  
7 probabilities to obtain a number; and

8 means cooperative with the combining means for scheduling for the  
9 future point in time no more than the number of new tasks for servicing by the  
10 plurality of the resources.

1 22. **(Previously presented)** A work-management apparatus  
2 comprising:  
3 means for determining an amount of time  $t$  that a resource has been  
4 servicing a task by now;  
5 means cooperative with the time-determining means for determining  
6 a probability  $F(t+h)$  of the resource servicing the task to completion within a total  
7 amount of time  $t+h$ , where  $h$  is an amount of time;  
8 means cooperative with the time-determining means for determining  
9 a probability  $F(t)$  of the resource completing servicing the task by now;  
10 means cooperative with both of the probability-determining means for  
11 determining a probability  $P$  that the resource will complete servicing the task  
12 within the amount of time  $h$  from now as  $\frac{F(t+h) - F(t)}{1 - F(t)}$ ; and

means cooperative with the P-determining means and responsive to  
P for scheduling another task for servicing.

1 23. **(Previously presented)** The apparatus of claim 21 wherein:  
2 the means for combining comprise  
3 means for summing the probabilities to obtain the number.

1 24. **(Previously presented)** The apparatus of claim 21 wherein:  
2 the means for determining comprise  
3 means for determining, for each of the resources, an amount of time  $t$   
4 that the resource has been servicing a task by now;  
5 means for determining, for each of the resources, a probability  $F(t+h)$   
6 of the resource servicing its task to completion within a total amount of time  $t+h$ ,  
7 where  $h$  is an amount of time;

8 means for determining, for each of the resources, a probability  $F(t)$  of  
9 the resource completing servicing its task by now; and  
means for determining, for each of the resources, a probability  $P$  that  
the resource will complete servicing its task at the future point in time the amount  
of time  $h$  from now as  $\frac{F(t+h) - F(t)}{1 - F(t)}$ .

1 25. **(Previously presented)** The apparatus of claim 21 in a call  
2 center wherein:  
3 tasks comprise calls; and  
4 the means for scheduling comprise  
5 means responsive to  $P$ , for determining whether or not to initiate or  
6 cancel an outbound call.

1 26. **(Previously presented)** The apparatus of claim 22 wherein:  
2 the means for scheduling comprise  
3 means responsive to  $P$ , for determining whether or not to initiate said  
4 another task.

1 27. **(Previously presented)** The apparatus of claim 22 in a call  
2 center wherein:  
3 tasks comprise calls; and  
4 the means for scheduling comprise  
5 means responsive to  $P$ , for determining whether or not to initiate an  
6 outbound call.

1 28. **(Previously presented)** The apparatus of claim 22 wherein:  
2 the means for determining an amount of time  $t$  comprise  
3 means for determining the amount of time  $t$  for each of a plurality of  
4 resources;  
5 the means for determining a probability  $F(t+h)$  comprise  
6 means for determining the probability  $F(t+h)$  for each of the plurality  
7 of resources;  
8 the means for determining a probability  $F(t)$  comprise

9 means for determining the probability  $F(t)$  for each of the plurality of  
10 resources, and  
11 means for determining a number of the plurality of resources that will  
12 likely have completed servicing their respective tasks within the amount of time  $h$   
13 from now as a sum of the probabilities  $P$  determined for individual ones of the  
14 plurality of resources; and  
15 the means for scheduling comprise  
16 means responsive to determining the number of the resources, for  
17 scheduling new tasks for servicing.

1 29. **(Previously presented)** The apparatus of claim 28 wherein:  
2 the means for scheduling comprise  
3 means for scheduling no more than the number of the tasks for  
4 servicing.

1 30. **(Previously presented)** The apparatus of claim 22 wherein:  
2 the means for determining a probability  $F(t+h)$  comprise  
3 means for obtaining historical task-completion statistics, and  
4 means for determining the probability  $F(t+h)$  from the obtained  
5 statistics; and  
6 the means for determining a probability  $F(t)$  comprise  
7 means for determining the probability  $F(t)$  from the obtained statistics.

1 31. **(Previously presented)** The apparatus of claim 30 wherein:  
2 the means for obtaining historical task-completion statistics comprise  
3 means for obtaining a mean and a variance of time historically spent  
4 by resources on servicing tasks to completion.

1 32. **(Previously presented)** The apparatus of claim 22 wherein:  
2 the means for determining a probability  $F(t+h)$  comprise  
3 means for obtaining historical task-completion statistics,



4 means for fitting the task-completion statistics into a lifetime closed-  
5 form cumulative-probability distribution to determine parameters of the  
6 distribution, and  
7 means for evaluating the distribution with the determined parameters  
8 and the total amount of time  $t+h$  to obtain  $F(t+h)$ ; and  
9 the means for determining a probability  $F(t)$  comprise  
10 means for evaluating the distribution with the determined parameters  
11 and the amount of time  $t$  to obtain  $F(t)$ .

1 33. **(Previously presented)** The apparatus of claim 32 wherein:  
2 the means for obtaining historical task-completion statistics comprise  
3 means for obtaining a mean and a variance of time historically spent  
4 by resources on servicing tasks to completion;  
5 the cumulative-probability distribution  $F$  comprises a Weibull  
6 distribution; and  
7 the parameters comprise a dispersion parameter and a parameter of  
8 central tendency.

1 34. **(Previously presented)** The apparatus of claim 22 wherein:  
2 the means for determining an amount of time  $t$  comprise  
3 means for determining the amount of time  $t$  that the resource has  
4 been servicing a task of one of a plurality of different types of tasks; and  
5 the means for determining historical task-completion statistics  
6 comprise  
7 means for determining the historical task-completion statistics for the  
8 one type of tasks.

1 35. **(Previously presented)** The apparatus of claim 22 wherein:  
2 the means for scheduling another task comprise  
3 means responsive to  $P$  for initiating preparation of a task that may  
4 require servicing by an agent at a later time.

1 36. **(Previously presented)** The apparatus of claim 22 wherein:

2           the means for determining a probability  $F(t+h)$  comprise  
3           means for obtaining a historical histogram for task completion, and  
4           means for evaluating a cumulative said probability with the obtained  
5 histogram for the total amount of time  $t+h$  to obtain  $F(t+h)$ ; and  
6           the means for determining a probability  $F(t)$  comprise  
7           means for evaluating the cumulative probability with the obtained  
8 histogram for the amount of time  $t$  to obtain  $F(t)$ .

1           37. **(Previously presented)** The apparatus of claim 22 wherein:  
2           the means for scheduling comprise  
3           means responsive to  $P$ , for canceling preparation of a task that could  
4 require servicing by a resource.

1           38. **(Previously presented)** The medium of claim 20 wherein:  
2           using comprises  
3           scheduling for the future point in time no more than the number of the  
4 new tasks to become available for servicing by the plurality of the resources.

1           39. **(Previously presented)** The medium of claim 20 wherein:  
2           combining comprises  
3           summing the probabilities to obtain the number.

1           40. **(Previously presented)** The medium of claim 20 wherein:  
2           determining comprises  
3           for each of the resources, determining an amount of time  $t$  that the  
4 resource has been servicing a task by now;  
5           for each of the resources, determining a probability  $F(t+h)$  of the  
6 resource servicing its task to completion within a total amount of time  $t+h$ , where  
7  $h$  is an amount of time;  
8           for each of the resources, determining a probability  $F(t)$  of the  
9 resource completing servicing its task by now; and

10 for each of the resources, determining a probability  $P$  that the  
11 resource will complete servicing its task at the future point in time the amount of  
12 time  $h$  from now as  $\frac{F(t+h) - F(t)}{1 - F(t)}$ .

1 41. **(Previously presented)** The method of claim 20 for a call  
2 center wherein:  
3 tasks comprise calls; and  
4 scheduling comprises  
5 in response to  $P$ , determining whether or not to initiate or cancel an  
6 outbound call.

1 42. **(Previously presented)** A computer-readable medium  
2 containing instructions which, when executed in a computer, cause the computer  
3 to perform the steps of:  
4 determining an amount of time  $t$  that a resource has been servicing a  
5 task by now;  
6 determining a probability  $F(t+h)$  of the resource servicing the task to  
7 completion within a total amount of time  $t+h$ , where  $h$  is an amount of time;  
8 determining a probability  $F(t)$  of the resource completing servicing the  
9 task by now;  
10 determining a probability  $P$  that the resource will complete servicing  
11 the task within the amount of time  $h$  from now as  $\frac{F(t+h) - F(t)}{1 - F(t)}$ ; and  
12 in response to  $P$ , scheduling another task for servicing.

1 43. **(Previously presented)** The method of claim 42 wherein:  
2 scheduling comprises  
3 in response to  $P$ , determining whether or not to initiate said another  
4 task.

1                   44. **(Previously presented)** The medium of claim 42 for a call  
2 center wherein:  
3                   tasks comprise calls; and  
4                   scheduling comprises  
5                   in response to  $P$ , determining whether or not to initiate an outbound  
6 call.

1                   45. **(Previously presented)** The medium of claim 42 further  
2 comprising instructions which, when executed in the computer, cause the  
3 computer to perform the steps of:  
4                   performing the determining steps for a plurality of resources, and  
5                   determining a number of the resources that will likely have completed  
6 servicing their respective tasks within the amount of time  $h$  from now as a sum of  
7 the probabilities  $P$  determined for individual ones of the plurality of resources;  
8 wherein  
9                   scheduling comprises  
10                  in response to determining the number of the resources, scheduling  
11 new tasks for servicing.

1                   46. **(Previously presented)** The medium of claim 45 wherein:  
2                   scheduling tasks for servicing comprises scheduling no more than  
3 the number of the tasks for servicing.

1                   47. **(Previously presented)** The medium of claim 42 wherein:  
2 determining a probability  $F(t+h)$  comprises  
3 obtaining historical task-completion statistics, and  
4 from the obtained statistics determining the probability  $F(t+h)$ ; and  
5 determining a probability  $F(t)$  comprises  
6 from the obtained statistics determining the probability  $F(t)$ .

1                   48. **(Previously presented)** The medium of claim 47 wherein:  
2 obtaining historical task-completion statistics comprises

3 obtaining a mean and a variance of time historically spent by  
4 resources on servicing tasks to completion.

1 49. **(Previously presented)** The medium of claim 42 wherein:  
2 determining a probability  $F(t+h)$  comprises  
3 obtaining historical task-completion statistics,  
4 fitting the task-completion statistics into a lifetime closed-form  
5 cumulative-probability distribution to determine parameters of the distribution,  
6 and  
7 evaluating the distribution with the determined parameters and the  
8 total amount of time  $t+h$  to obtain  $F(t+h)$ ; and  
9 determining a probability  $F(t)$  comprises  
10 evaluating the distribution with the determined parameters and the  
11 amount of time  $t$  to obtain  $F(t)$ .

1 50. **(Previously presented)** The medium of claim 49 wherein:  
2 obtaining historical task-completion statistics comprises  
3 obtaining a mean and a variance of time historically spent by  
4 resources on servicing tasks to completion;  
5 the cumulative-probability distribution  $F$  comprises a Weibull  
6 distribution; and  
7 the parameters comprise a dispersion parameter and a parameter of  
8 central tendency.

1 51. **(Previously presented)** The method of claim 42 wherein:  
2 determining an amount of time  $t$  comprises  
3 determining the amount of time  $t$  that the resource has been servicing  
4 a task of one of a plurality of different types of tasks; and  
5 determining historical task-completion statistics comprises  
6 determining the historical task-completion statistics for the one type  
7 of tasks.

1                    52. **(Previously presented)** The medium of claim 42 wherein:  
2                    scheduling another task comprises  
3                    in response to  $P$  initiating preparation of a task that may require  
4 servicing by an agent at a later time.

1                    53. **(Previously presented)** The medium of claim 42 wherein:  
2                    determining a probability  $F(t+h)$  comprises  
3                    obtaining a historical histogram for task completion, and  
4                    evaluating a cumulative said probability with the obtained histogram  
5 for the total amount of time  $t+h$  to obtain  $F(t+h)$ ; and  
6                    determining a probability  $F(t)$  comprises  
7                    evaluating the cumulative probability with the obtained histogram for  
8 the amount of time  $t$  to obtain  $F(t)$ .

1                    54. **(Previously presented)** The medium of claim 42 wherein:  
2                    scheduling comprises  
3 in response to  $P$ , canceling preparation of a task that could require servicing by a  
4 resource.